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ABSTRACT

One embodiment discloses receiving a number of parameter values for a multicomponent circuit. From the received parameter values, a number of parasitic values for
various components in the multi-component circuit are determined. For example,
parasitic resistor values and parasitic capacitor values for transistors in the multicomponent circuit are determined. The parasitic resistor values and parasitic capacitor
values are used in simulating the multi-component circuit. According to a disclosed
embodiment, a layout of the multi-component circuit is then generated that results in
parasitic values that are the same as the parasitic values already used in simulating the
multi-component circuit. As such, the parasitic values of the multi-component circuit
have already been taken into account in the initial circuit simulation and there is no need
to extract the internal parasitics of the multi-component circuit for further circuit
simulations.